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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

HOFFMAN, BRANDON S

ART UNIT

PAPER NUMBER

2136

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/879,994	Applicant(s) TESHIGAWARA, MINORU	
	Examiner BRANDON S. HOFFMAN	Art Unit 2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-17,19 and 21-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-17,19 and 21-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1, 3, 5-17, 19, and 21-23 are pending in this office action.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 26, 2007, has been entered.

3. Applicant's arguments, filed December 26, 2007, have been fully considered but they are not persuasive.

Rejections

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1, 3, 5-16, 19, 21, and 22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1, 19, and 22 (the independent claims) recite an apparatus, system, program, respectively. Each claim recites means for performing the limitations of the apparatus, system, and program. The means for performing can be construed as just software, thus making the claim non-statutory. The remaining claims depend from claim 1, 19, and 22, and therefore inherit their deficiencies. Additionally, claim 22 cites a program on a computer including code. The specification, paragraph 0092, states that the program is **stored** on a medium, such amendment would fix the 101 issue with claim 22 being a program.

Claim Rejections - 35 USC § 103

7. Claims 1, 3, 5-11, 16, 17, 19, and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Usami et al. (U.S. Patent No. 6,785,814) in view of Davis (U.S. Patent No. 7,069,584).

Regarding claims 1, 17, and 22, Usami et al. teaches and image processing apparatus/method/program comprising:

- Additional information generating means for generating additional information (fig. 11, ref. num 62); and
- Adding means for repeatedly adding the additional information to image data to generate information-added data so as to make it difficult to visually identify the additional information (fig. 11, ref. num 63 and col. 20, lines 10-29).

Usami et al. does not teach encrypting means for encrypting the information-added data to make it difficult to detect a position where the additional information is added and for outputting the encrypted information-added data to an image forming apparatus, wherein said encrypting means encrypts the information-added data by randomly arranging the additional information **together with** the image data, **and wherein the additional information is randomly arranged across the whole area of the image data.**

Davis teaches encrypting means for encrypting the information-added data to make it difficult to detect a position where the additional information is added and for outputting the encrypted information-added data to an image forming apparatus (fig. 2), wherein said encrypting means encrypts the information-added data by randomly arranging the additional information **together with** the image data, **and wherein the additional information is randomly arranged across the whole area of the image data** (col. 3, lines 50-67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made, to combine encrypting information-added data in a position where it is difficult to detect, as taught by Davis, with the system/method/program of Usami et al. It would have been obvious for such modifications because the confusion of the location of the embedded data provides authentication (see abstract of Davis).

Regarding claim 3, Usami et al. as modified by Davis teaches wherein said encrypting means adds key information for specifying an encryption method to the encrypted information-added data (see col. 1, lines 16-21 of Usami et al.).

Regarding claim 5, Usami et al. as modified by Davis teaches wherein said encrypting means arranges the information-added data on the basis of a predetermined random pattern (see col. 2, lines 22-34 of Usami et al.).

Regarding claim 6, Usami et al. as modified by Davis teaches wherein the key information is information for specifying the random pattern (see col. 2, lines 22-34 of Usami et al.).

Regarding claim 7, Usami et al. as modified by Davis teaches transmitting means for transmitting the image data encrypted by said encrypting means to a connected image forming apparatus (see fig. 5 of Usami et al.).

Regarding claim 8, Usami et al. as modified by Davis teaches wherein the additional information includes first information for specifying the image forming apparatus (see col. 12, lines 39-49 of Usami et al.).

Regarding claim 9, Usami et al. as modified by Davis teaches wherein the first information is notified from the image forming apparatus (see col. 12, lines 39-49 of Usami et al.).

Regarding claim 10, Usami et al. as modified by Davis teaches wherein the additional information includes second information associated with a processing environment for the image data (see col. 4, lines 31-46 of Usami et al.).

Regarding claim 11, Usami et al. as modified by Davis teaches wherein the second information includes information for specifying the image processing apparatus (see col. 4, lines 31-46 of Usami et al.).

Regarding claim 16, Usami et al. as modified by Davis teaches wherein the image data is color image data made of a plurality of color components, and said adding means adds the additional information to data of a predetermined color component of the color image data (see col. 2, lines 40-53, 66-67 and col. 3, lines 1-20 of Usami et al.).

Regarding claim 19, Usami et al. teaches an image processing system having an image processing apparatus connected to an image forming apparatus (fig. 5 and col. 1, lines 16-20),

Said image processing apparatus including

- Additional information generating means for generating additional information (fig. 11, ref. num 62);
- Adding means for repeatedly adding the additional information to image data to generate information-added data so as to make it difficult to visually identify the additional information (fig. 11, ref. num 63);
- Transmitting means for transmitting the encrypted image data to said image forming apparatus (fig. 5); and
Said image forming apparatus including
- Receiving means for receiving the encrypted data transmitted from said image processing apparatus (fig. 12, ref. num 51) and
- Image forming means for forming a visible image on the basis of the decrypted information-added data (fig. 12, ref. num 65 and col. 16, lines 18-30).

Usami et al. does not teach encrypting means for encrypting the information-added data to make it difficult to detect a position where the additional information is added or decrypting means for obtaining the information-added data by decrypting the received encrypted data, wherein said encrypting means encrypts the information-added data by randomly arranging the additional information **together with** the image data, **and wherein the additional information is randomly arranged across the whole area of the image data.**

Davis teaches encrypting means for encrypting the information-added data to make it difficult to detect a position where the additional information is added and decrypting means for obtaining the information-added data by decrypting the received encrypted data (fig. 2), wherein said encrypting means encrypts the information-added data by randomly arranging the additional information **together with** the image data, **and wherein the additional information is randomly arranged across the whole area of the image data** (col. 3, lines 50-67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made, to combine encrypting information-added data in a position where it is difficult to detect and decrypting the encrypted information, as taught by Davis, with the system of Usami et al. It would have been obvious for such modifications because the confusion of the location of the embedded data provides authentication (see abstract of Davis).

Regarding claim 21, Usami et al. as modified by Davis teaches wherein

- Said encrypting means adds key information for specifying an encryption method to the encrypted information-added data (see col. 1, lines 16-21 of Usami et al); and
- Said decrypting means decrypts the encrypted data on the basis of the key information added by said encrypting means (see col. 16, lines 18-30 of Usami et al.).

Regarding claim 23, Usami et al. as modified by Davis teaches a storage medium storing the program defined in claim 22 (see fig. 1 of Usami et al.).

Claims 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Usami et al. (USPN '814) and Davis (USPN '941) in view of Ito et al. (US 2001/0013097 A1).

Regarding claim 12, Usami et al. as modified by Davis teach all the limitations for the following limitation. Ito et al. teaches wherein the information for specifying the image processing apparatus includes a network ID of the image processing apparatus (paragraph 13).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Ito et al. within the system of Usami et al./Davis because a network ID is essential for the image processing apparatus to be identifiable and hence connected to a network.

Regarding claim 13, Usami et al. as modified by Davis teach all the limitations except for the following limitation. Ito et al. teaches wherein the network ID is acquired in accordance with a type of network to which the image processing apparatus is connected (paragraph 13).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Ito et al. within the system of Usami et al./Davis because a network ID is essential for the image processing apparatus to be identifiable and hence connected to a network.

Regarding claim 14, Usami et al. as modified by Davis teach all the limitations except for the following limitation. Ito et al. teaches wherein the information for specifying the image processing apparatus includes a user ID of the image processing apparatus (paragraph 13).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Ito et al. within the system of Usami et al./Davis because a network ID is essential for the image processing apparatus to be identifiable and hence connected to a network.

Regarding claim 15, Usami et al. as modified by Davis teach all the limitations except for the following limitation. Ito et al. teaches wherein the second information includes processing date information of the image data (abstract).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Ito et al. within the system of Usami et al./Davis

because the processing date information will enable ID of the embedded supplemental information to be unique and hence more secure.

Response to Arguments

8. Applicant argues that the combination of references do not teach additional data randomly arranged with image data, wherein the additional information is arranged across the whole area of the image data (page 8 and 9).

Regarding applicant's argument, examiner disagrees. First, Davis teaches a Super Pin, which is comprised of a Secret Identifier and Random Data (see fig. 2). The Secret Identifier is the user's PIN (or image data, that is, the data that is supposed to be retrievable for later use). The Random Data is data that the user places sporadically throughout the Super Pin in any remaining spaces to ensure the Secret Identifier can not be easily obtained. The Random Data is the additional data as claimed by applicant. The Random Data isn't only used for encryption, i.e., the Random Data is not the "key" for encrypting the Secret Identifier. The Random Data is additional information that is added to the Super Pin to make it hard to find out where the Secret Identifier and Random Data are located. The client, or user, is manually providing the encryption (scrambling) by making choices (based on time, dates, random numbers that the user thinks) for the Random Data (see col. 5, lines 32-35)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRANDON S. HOFFMAN whose telephone number is (571)272-3863. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser G. Moazzami can be reached on 571-272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brandon S Hoffman/
Primary Examiner, Art Unit 2136